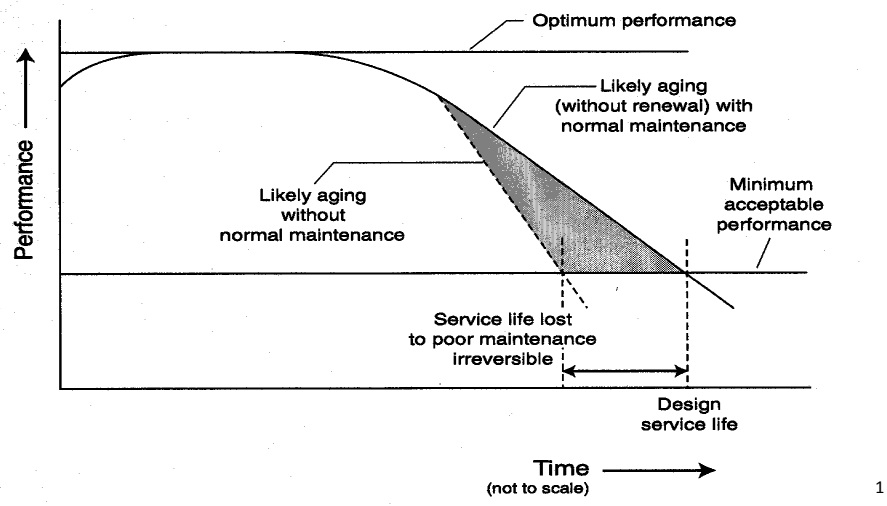
Federal Energy Management Program
Draft Charter
For the Operations and Maintenance Working Group
May 2010

1. Background

The federal government is faced with ever increasing challenges to become more energy and water efficient, reduce greenhouse gases, and overall become a leading example of energy and environmental stewardship. The traditional approach to energy and water efficiency has been to retrofit buildings with newer equipment that operates at higher efficiencies, and assuming that solves the problem. But we habitually ignore the importance of proper operation and maintenance of older equipment and we continue this practice with newer equipment as well. As the following chart illustrates, operational efficiency tends to degrade over time, and it degrades more rapidly if proper maintenance is not performed. Further, poorly maintained and/or improperly operated facilities will reach the end of their life spans prematurely. So we pay a double price for ignoring good O&M: lower efficiencies and shorter life spans that would otherwise be possible.



[1]

Proper Operations and Maintenance should be considered a major foundation for sustained energy efficiency, and can help significantly in reaching the goals set forth by the Congress and the President. 10-30% savings are typical - and well documented, and can help reach mandated goals and beyond. Other benefits include extended equipment life, improved occupant satisfaction and productivity, and enhanced health and safety, and equipment availability and reliability. Consistent use of best practices in O&M also results in reduced life cycle costs. Generally, O&M Best practices do not require large

[1] Source: National Science Foundation

capitol investments and frequently show simple payback of two years or less, often achieving payback well within one year.

The continuing challenge in the world of federal facility management is to show the business case for O&M and the downside of deferred maintenance. Maintenance budgets are generally woefully underfunded, training is limited, and management still does not see the long-term benefits of well executed O&M programs.

2. Operations and Maintenance Defined

Facilities operations and maintenance encompasses the broad spectrum of services required to assure the built environment will perform the functions for which a facility was designed and constructed. Operations and maintenance typically includes the day-to-day activities necessary for the building and its systems and equipment to perform their intended function. Operations and maintenance are combined into the common term O&M because a facility cannot operate at peak efficiency without being maintained; therefore the two are discussed as one.[2] Major subject areas under the O&M Working Group include, but are not limited to the following:

- Energy auditing
- Commissioning and retro-commissioning
- Metering, including advanced and smart meters and sensors
- Energy analysis software and tools
- Energy management control systems
- Computerized maintenance management systems
- Measurement and verification
- Building tune-ups
- Testing and balancing
- Training
- Education and awareness
- Best practices

3. The O&M Working Group Challenges

The challenges of the O&M Working group are many, but it is necessary to address them if we truly expect improved O&M to be a recognized and significant part of our long term sustainable energy efficiency future. Therefore, the O&M working group's charter is to accomplish the following:

a. Educate federal energy managers on O&M best practices
b. Document the benefits of O&M in meeting federal mandates
c. Develop outreach materials
d. Measure and verify the successes and prove the real value
e. Communicate the business case for investment in O&M

[2] The Whole building Design Guide - http://www.wbdg.org/om/om.php

4. Membership

The group will be chaired by a FEMP staff member, and consist of representatives from the federal government, industry, laboratory, academia, and others as needed meet the challenges. Members, upon joining the group, make a commitment to attend the regular meetings and to be active contributors to the development of O&M-related solutions.

5. Frequency of the Meetings

The group will meet approximately every two months, with teleconference calls and/or web-based meeting in between as appropriate.

6. Subgroups

It may be deemed necessary to form sub-groups from time to time to address specific key issues. Sub groups will be given specific task assignments and time limits within with to solve specific problems or produce specific results.